

## **RESERVEN WEITER GESTIEGEN AUF DER KYLYLAHTI MINE, FINNLAND**

- **Enthaltenes Kupfer um 13% und enthaltenes Gold um 25% gestiegen**
  - **Kupfermetallreserven übersteigen Vorabbaureserven deutlich**
  - **Zweiter erfolgreicher Anstieg der Reserven**
  - **Geschlussfolgerte Ressourcen in der Tiefe stehen für zukünftiges Reservenwachstum zur Verfügung**
  - **Minenbetriebsdauer von 7,5 Jahren mit Zielproduktion von 650.000 t p.a.**
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7. Mai 2014

ASX: AOH, FSE: A2O

Altona Mining Limited ("Altona" oder das "Unternehmen") freut sich über die Bekanntgabe eines Anstieges der Erzreservenschätzung für die zu 100% im Eigentum befindliche Kylylahti Untertagemine auf ihrem Outokumpu Kupferprojekt in Finnland. Dieser Anstieg folgt der aufgestuften Ressourcenschätzung wie schon an der ASX am 26. März 2014 bekannt gegeben.

Die Erzreservenschätzung für die Kylylahti Mine bereinigt um den bisherigen Abbau per 31. Dezember 2013 (siehe Tabelle 1 im Vergleich) liegt bei:

**4,55 Mio. Tonnen mit 1,66% Kupfer, 0,83g/t Gold und 0,62% Zink mit enthaltenen:**

**75.651 Tonnen Kupfer, 121.915 Unzen Gold und 28.032 Tonnen Zink**

Zusätzlich konnten 0,2 Mio. Tonnen geplante Produktion abgeleitet aus den Geschlussfolgerten Ressourcen als Abbaulagerbestand klassifiziert werden.

Unter Benutzung des Nettoschmelzertrages für die Konzentrat Verkäufe und dem enthaltenen Kupferäquivalent entspricht dies nun 97.400 Tonnen mit einem Grad von 2,14% Kupferäquivalent. Diese Schätzung ist höher in der Tonnage, den Graden und dem enthaltenen Metall gegenüber Schätzung vom August 2010 für die Vorproduktionsreserve (siehe Abb. 3 Ressourcenwachstum).

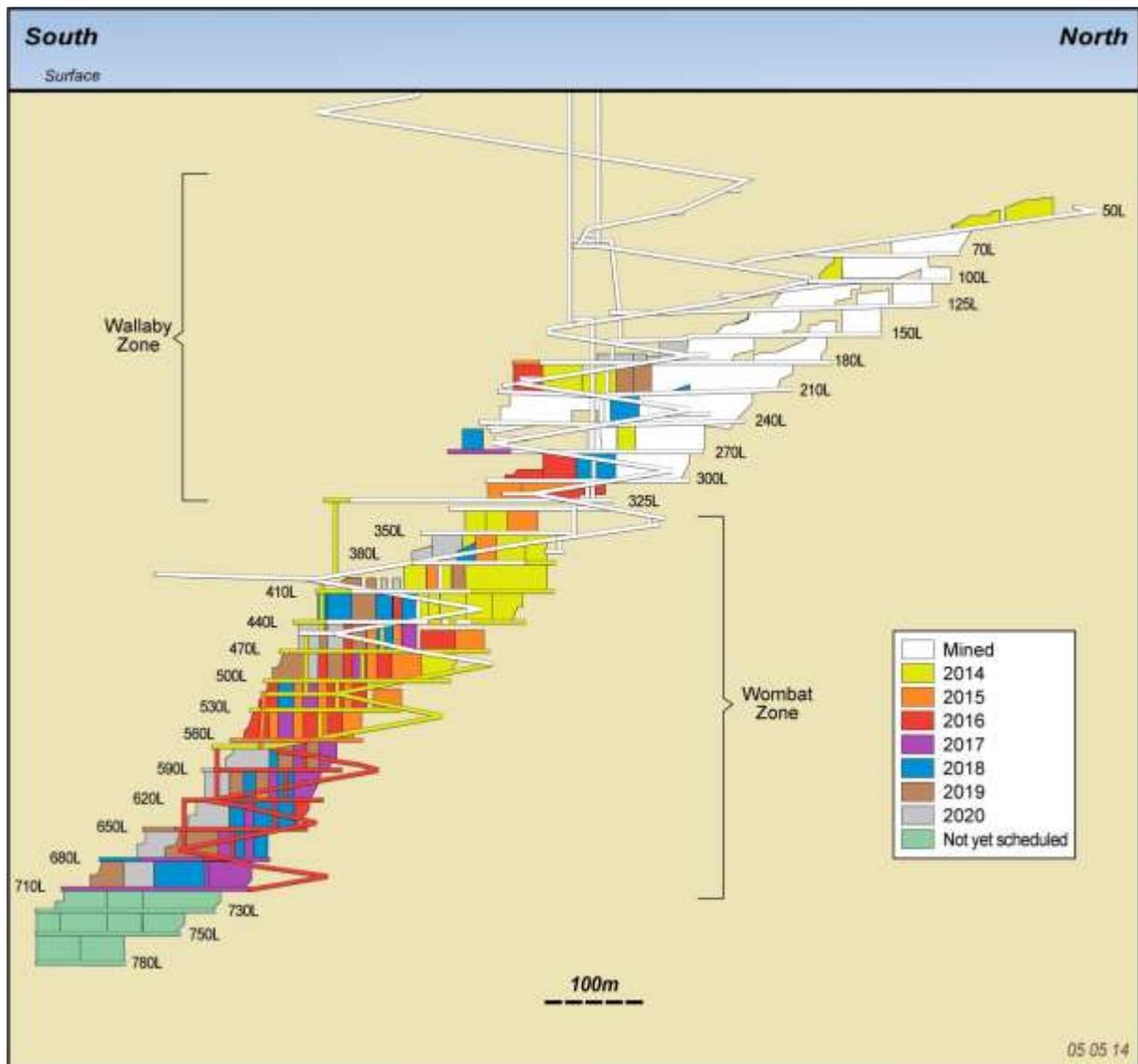
Altona Managing Director Dr. Alistair Cowden sagte: "Dies ist der zweite folgende Anstieg in den Reserven. Wir erwarten, dass die Ausfachungs- und Erweiterungsbohrungen den Trend des Ersatzes oder weiter wachsender Ressourcen bestätigen werden. Der Anstieg der Beiproduktgrade im Gold und der enthaltenen Unzen Gold auf 122.000 hat uns sehr gefreut.

Altona plant nun einen Anstieg der Produktionsrate auf 650.000 Tonnen p.a. und einen abbaufähigen Lagerbestand von insgesamt 4,75 Mio. Tonnen der eine Produktion von mindestens 7,5 Jahren ermöglichen wird."

Interview Commodity-TV mit Dr. Alistair Cowden über den Kupfermarkt: <http://bit.ly/1il6Z0o>

Den Minenplan sehen Sie in Abbildung 1.

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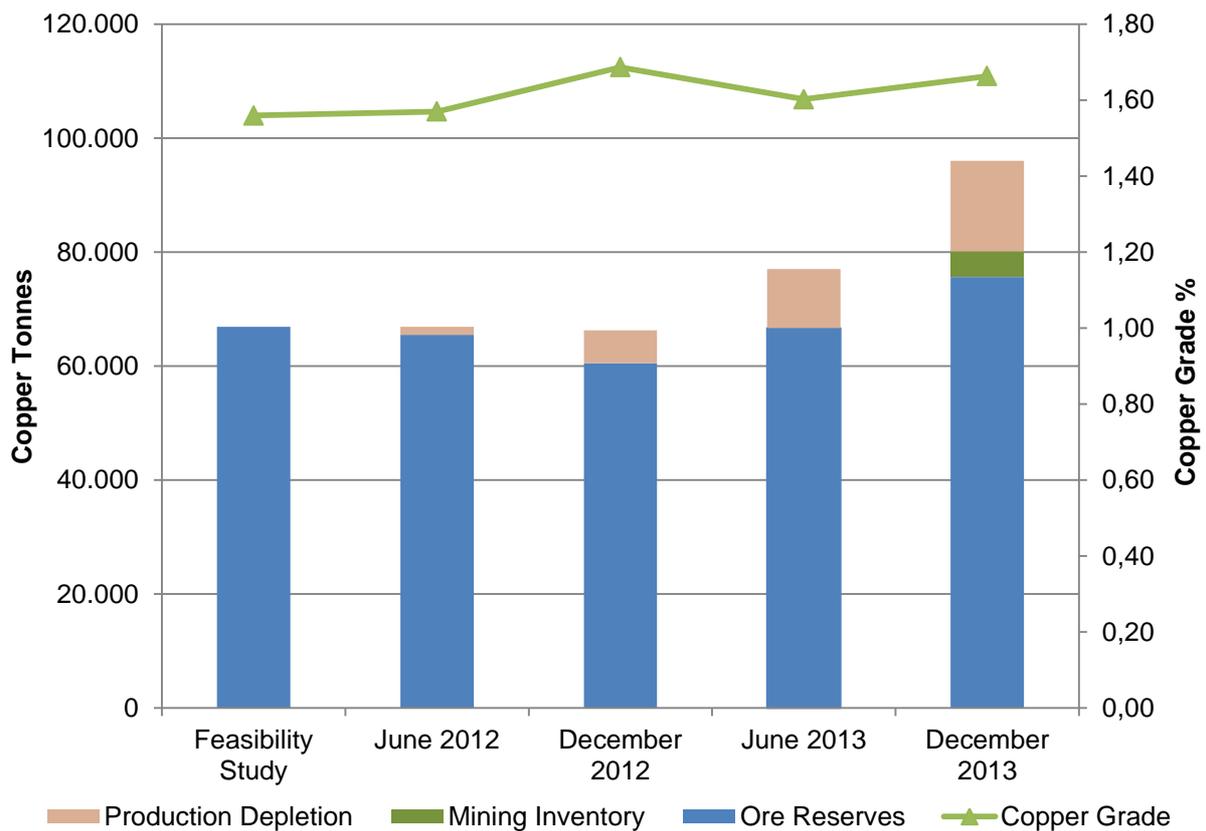
**Abb. 1:** Längsschnitt der Kylylahti Mine und Minenplan

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**Abb. 2:** Produktionsbohrungen auf der Kylylahti Mine

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**Abb. 3:** Kupfermetall in den Reserven

**Tabelle 1:** Kylylahti Erzreservenschätzung Dezember 2013

	Tonnen (Mio.)	Cu (%)	Au (g/t)	Zn (%)	Cu (t)	Au (Unzen)
Bewiesene Erzreserven	0,57	1,43	0,66	0,66	8.151	12.000
Mögliche Erzreserven	3,98	1,70	0,86	0,61	66.068	110.000

<b>Total Reserven</b>	<b>4,55</b>	<b>1,66</b>	<b>0,83</b>	<b>0,62</b>	<b>75.651</b>	<b>122.000</b>
Abbau Lagerbestand	0,2	1,75	0,54	0,63	4.475	4.415

*Bemerkung: Gesamtzahlen können durch Rundungen abweichen.*

Diese Schätzung ist höher als die vom 30. Juni 2013 Schätzung mit 4,2 Mio. tonnen mit 1,60% Kupfer, 0,73g/t Gold und 0,63% Zink (siehe ASX Bekanntmachung vom 29. August 2013). Das enthaltene Kupfer stieg um 13% an als Ergebnis eines Anstieges von 9% in der Erztonnage und um 4% in den Kupfergraden.

**Tabelle 2:** *Kylylahti Erzreservenschätzung, Juni 2013 (Zahlen werden ersetzt, gilt nur für Vergleichszwecke)*

	<b>Tonnen (Mio.)</b>	<b>Cu (%)</b>	<b>Au (g/t)</b>	<b>Zn (%)</b>	<b>Cu (t)</b>	<b>Au (Unzen)</b>
Bewiesene Erzreserven	0,6	1,51	0,75	0,66	9.600	14.500
Mögliche Erzreserven	3,5	1,62	0,73	0,62	56.700	82.200
<b>Total Reserven</b>	<b>4,2</b>	<b>1,60</b>	<b>0,73</b>	<b>0,63</b>	<b>66.700</b>	<b>97.700</b>

*Bemerkung: Gesamtzahlen können durch Rundungen abweichen.*

**Für Fragen wenden Sie sich bitte an:**

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Es gilt ausschließlich das Englische Original dieser Pressemitteilung

## **Über Altona Mining Ltd.**

Altona Mining Limited ist ein Kupferproduzent in Finnland und besitzt ein großes Kupferentwicklungsprojekt in Australien.

Das Outokumpu Projekt des Unternehmens im Südosten Finnlands nahm die Produktion Anfang 2012 auf. Das Projekt schließt die Kylylahti-Untertagemine mit einer Jahreskapazität von 600.000 t und die Luikonlahti-Mühle ein. Die durchschnittliche Jahresproduktion liegt bei 9.000 t Kupfer, 9.000 Unzen Gold und 1.600 t Zink mit der Möglichkeit einer Produktionserweiterung. Die regionalen Ressourcen sind in zwei stillgelegten Minen und 4 noch nicht abgebauten Ressourcen innerhalb von 30 km der Luikonlahti-Mühle beherbergt. Finnland ist Mitglied der Eurozone und hat eine lange Bergbauhistorie, eine stabile Steuergesetzgebung (20 %) und keine weiteren Abgaben.

Altonas weiteres Herzstück ist das Roseby-Kupferprojekt nahe Mt. Isa in Queensland und eines der größten noch nicht entwickelten Kupferprojekte Australiens. Das erste angestrebte Entwicklungsziel mit 7 Mio. t pro Jahr ist die Kupfer-Gold-Tagebauminne und Aufbereitungsanlage Little Eva. Little Evas angestrebte Jahresproduktion<sup>1</sup> soll bei 38.800 t Kupfer und 17.000 Unzen Gold für mindestens 11 Jahre Produktionsdauer liegen. Es konnte eine endgültige Machbarkeitsstudie abgeschlossen werden und das Projekt ist voll genehmigt. Altona ist derzeit in Verhandlungen mit potenziellen Partnern, um die Finanzierung dieses Großprojektes ermöglichen zu können.

Altona Mining ist an der Australian Securities Exchange und der Börse Frankfurt notiert.

<sup>1</sup>Siehe ASX-Pressemitteilung „Cost review Delivers Major Upgrade to Little Eva“ vom 13. März 2014, die die Informationen hinsichtlich dieses Produktionsziels und die auf diesem Produktionsziel basierenden Finanzprognosen skizziert. Diese Pressemitteilung ist bei [www.altonamining.com](http://www.altonamining.com) oder [www.asx.com.au](http://www.asx.com.au) zu finden. Das Unternehmen bestätigt, dass alle wesentlichen Annahmen, die das Produktionsziel unterstützen und die auf diesem Produktionsziel basierenden Finanzprognosen, die in der oben genannten Pressemitteilung erwähnt werden, weiterhin gültig sind und sich nicht wesentlich geändert haben. Es gilt ausschließlich das Englische Original dieser Pressemitteilung.

## Aussage der kompetenten Person

Die Informationen in dieser ASX-Pressemitteilung, die sich auf Explorationsergebnisse, Mineralressourcen oder Erzvorräte beziehen, basieren auf Informationen, die von Dr. Alistair Cowden BSc (Hons), PhD, MAusIMM, MAIG, Managing Director von Altona zusammengestellt wurden. Er ist Mitarbeiter des Unternehmens und verfügt über ausreichendes Wissen und Erfahrung über diesen hier vorliegenden Vererzungs- und Lagerstättentyp. Seine Tätigkeiten qualifizieren ihn als kompetente Person gemäß den Regeln des 2012 Edition of the „Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves“. Dr. Alistair Cowden stimmt den hier eingefügten Informationen, die auf seinen Informationen basieren, in Form und Kontext je nach Auftreten zu.

## Weiter geht es in Englisch mit dem technischen Anhang. JORC 2012

The Company has reported Reserves according to the 2012 update of the JORC Code and a full "Table 1" is appended. Kylylahti is an operating mine with extensive prior disclosure. The estimates herein reflect Altona's bi-annual reserve review.

## Competent Persons Statement

1. Ore Reserve Estimates: The Kylylahti Ore Reserve Estimates that are reported in this ASX Release were undertaken by Mr Antti Sorsa MSc, MAusIMM, Mine Planning Manager at the Kylylahti mine and who is a full time employee of the Company and has sufficient experience which is relevant to the style of mineralisation and type of deposit under consideration and to the activity which they are undertaking to qualify as a Competent Person as defined in the 2012 Edition of the 'Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves'. Mr Sorsa consents to the inclusion in the report of the matters based on their information in the form and context in which it appears.
2. Responsibility for entire release: Information in this ASX Release that relates to Exploration Results, Mineral Resources or Ore Reserves is based on information compiled by Dr Alistair Cowden, BSc (Hons), PhD, MAusIMM, MAIG and Dr Iain Scott PhD Min. Processing, BSc Met. (Hons) who are both full time employee of the Company and who have sufficient experience which is relevant to the style of mineralisation and type of deposit under consideration and to the activity which they are undertaking to qualify as a Competent Person as defined in the 2012 Edition of the 'Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves'. Dr Alistair Cowden and Dr Iain Scott consent to the inclusion in the report of the matters based on their information in the form and context in which it appears.
3. Production target: An insignificant proportion of the estimated mine life, being less than 4.5% of the life of mine production target is based on inferred mineral resources. These inferred resources are scheduled for mining at the end of mine life and are located at the lower limit of the resource. These tonnes will be defined by infill drilling as mine development progresses deeper. Refer to ASX release of 26 March 2014 for further information on the Resource estimates for the Kylylahti Mine.
4. Copper Equivalence: When used, copper equivalence refers to copper in concentrate, not resources or reserves, or drill results. The copper equivalent grade is calculated by factoring the copper grade by Revenue from all products (Cu, Au, Zn, Ag)/ Revenue from copper.

## JORC Table 1

The table below is a description of the assessment and reporting criteria used in the Kylylahti Reserve Estimation that reflects those presented in Table 1 of The Australasian Code for the Reporting of Exploration Results, Mineral Resources and Ore Reserves (The JORC Code, 2012).

Criteria	Commentary
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Criteria	Commentary
<b>Estimation and Reporting of Ore Reserves</b>	
Mineral Resource Estimate for conversion to Ore Reserves	<ul style="list-style-type: none"> <li>The Kylylahti resource model (December 2013) was used for conversion to Ore Reserves.</li> <li>The Mineral Resource is inclusive of Ore Reserves.</li> </ul>
Site visits	<ul style="list-style-type: none"> <li>The Competent Person works at the mine and is actively involved in the planning process on a daily basis.</li> </ul>
Study status	<ul style="list-style-type: none"> <li>The mine is in production and feasibility studies have been superseded.</li> <li>The surface level at the mine is +92 metres above sea level. The reference level for the levels is sea level so it should be noticed that the level values represent the depth below the sea level not depth from surface.</li> <li>The Ore Reserves above level 380 reflect an operating underground mine. The Ore Reserve for this area has been updated based on the experience gained from production.</li> <li>Ore Reserves below the 380 level are based on the mine plan by the mine planning team which includes transverse stoping as the main mining method in that area. The plan for transverse stoping has been updated for this reserve estimate utilising the experiences gained from production in upper level longitudinal stopes when applicable.</li> </ul>
Cut-off parameters	<ul style="list-style-type: none"> <li>The ore cut-off grade is based upon a Net Smelter Return (NSR) value, which is derived from copper, gold and zinc grades, recoveries and payabilities. Payabilities and recoveries vary with grade and concentrate quality but on average recoveries are copper 92%, gold 75% and zinc 49%. Payabilities are copper 96.5%, gold subject to 1g/t deduction from gold in concentrate and zinc 50%.</li> <li>The following approach has been to take determining NSR values to be used as cut-off parameters in different mining situations in the mine:</li> <li>NSR of 15.66€/t for development material that has to be hauled to surface. This approximates a copper grade of 0.39%.</li> <li>NSR of 28.27€/t for stope boundaries where the ore can be extracted without additional stope preparation work. This approximates a copper grade of 0.63%.</li> <li>Below level 300 a depth increment of 0.25€/t is added to the NSR cut-off for each 30m level interval representing the change in ore haulage distance.</li> <li>At the 590 level an additional depth increment of 2.75€/t is added to the NSR cut-off representing the overall change in backfill haulage distance.</li> <li>Below level 590 a depth increment of 0.25€/t is added to the NSR cut-off for each 30 metre level interval representing the change in backfill haulage distance.</li> <li>The NSR cut-off value between levels 300-750 varies from 28.27€/t to 36.52€/t. This approximates a copper grade of 0.65-0.81%.</li> <li>An NSR of 52.19€/t for the minimum grade of an entire stoping panel. This approximates a copper grade of 1.09%.</li> </ul>
Mining factors or assumptions for levels above level 380	<p>The following is relevant for stoping design above level 380:</p> <ul style="list-style-type: none"> <li>The mining method used is longitudinal open stoping with cemented rock fill (CRF) and/or waste rock fill. Parts of the orebody, however, will be mined using upward stoping without backfill. The stopes vary in dimension as follows: Heights between 8 metres and 30 metres, lengths between 20 metres and 50 metres and width in average between 4 metres and 12 metres.</li> <li>A 5.5 x 5.5 metre decline is used for ore transportation and access to development drives. Level spacing is 25-30 metres vertical, and development drives are connected to the decline by access drives. In the upper parts of the mine (levels 50 to 150) access drives are located at the southern end of the orebody, in the middle parts (levels 180 to 300) access</li> </ul>

Criteria	Commentary
	<p>drives enter the orebody in the middle, and development drives extend to the north and south. In the lower parts (levels 325 and 350) the decline moves around the orebody from the footwall to hangingwall side, and accesses the orebody from the northern end. On level 380 the access is again at the southern end of the orebody.</p> <ul style="list-style-type: none"> <li>• Stoping generally proceeds from the northern and southern ends of the orebody, with mining upwards from the bottom. Due to the orebody plunging approximately ~25° to the south-west, the northernmost stopes on each level can be mined as a bottom level stope.</li> <li>• In areas where stopes can be accessed from above, the front end of the stopes will be filled with CRF. The next stope opening will then be blasted so that no pillar will be left against the CRF wall, thus maximising ore recovery.</li> <li>• Stope designs generally include dilution to ensure that the shapes are practical and can be mined and extracted. This dilution is included in the stope tonnes and grades as planned dilution. In addition, overbreak is assumed as unplanned dilution. The unplanned dilution factor applied is dependent upon the stope width and shape. It is assumed that approximately 0.5 metres of overbreak will occur on both sidewalls of the stope. Therefore dilution varies between 5% in wide stopes (&gt;20 metres) and 25% in narrow stopes (4 metres). When stope shape and stope location is seen as being exceptionally difficult an additional dilution factor of 2 to 10% is used.</li> <li>• Unplanned dilution is anticipated to come from footwall and hangingwall in a 50/50 ratio. The diluting material carries metal grades. The dilution grades that are used are calculated average resource model values for both Wallaby and Wombat orebodies assuming a 0.5 m thick layer on both sides of the stope.</li> <li>• The definition of dilution here is assumed to be the ratio of dilution tonnes / in-situ ore tonnes (before ore loss is applied).</li> <li>• The recovery from planned stopes is assumed to be 90% for open stoping and 85% for upward stoping. Additional ore losses are expected in potentially difficult stopes, based on their location or shape. The unrecovered ore (ore loss) is assumed to result from underbreak and over size material.</li> <li>• The mine is using a cavity measurement surveying (CMS) device for measuring the actual stope volumes. Stope recovery and dilution of each stope is analysed from the CMS-results and this information is used to continuously improve the planning and production processes.</li> <li>• The minimum stope width used is 4 metres.</li> <li>• The infrastructure for mining above level 380 has been completed. Infrastructure includes the decline, access tunnels, development drives, ventilation headings/rises and support headings (such as water sumps). Electricity, water, ventilation and water discharge systems are also in place.</li> <li>• Reserves have only been derived from Measured and Indicated Resource categories.</li> </ul>
Mining factors or assumptions for levels below level 380	<ul style="list-style-type: none"> <li>• The following is relevant for stoping below level 380.</li> <li>• The main mining method to be used between the 380 and 750 levels is transverse open stoping with cemented rock fill (CRF) and/or waste rock fill. Longitudinal open stoping with cemented rock fill (CRF) and/or waste rock fill will be used when it is applicable due to orebody geometry. Parts of these longitudinal areas will be mined using longitudinal upward stoping without backfill. The stope height in transverse stoping is planned to be 30 metres, the length between 8 metres and 45 metres. The width in primary stopes will be 10 metres and in secondary stopes 15 metres.</li> <li>• The decline is used for ore transportation and access to development drives. Level spacing is 30 metres and development drives are connected</li> </ul>

Criteria	Commentary
	<p>to the decline with access drives.</p> <ul style="list-style-type: none"> <li>• Access development is driven in the hangingwall waste rock parallel with the orebody. From there, transverse ore drives enter the orebody every 12.5 meters. At the northern and southern ends of the orebody, where transverse stoping is not feasible, longitudinal ore drives are built along the orebody and the ore is mined using longitudinal open stoping.</li> <li>• Transverse stopes may be mined in two stages; the first stage will exploit high-grade massive sulphides on the footwall (east) of the deposit and the second stage will retreat to mine largely disseminated ore in the hangingwall.</li> <li>• Longitudinal stoping will start from the northern end of the orebody, and proceed upwards from the lowest level. Transverse stoping will start with primary stopes in the middle of the orebody at the bottom level, or in the northern end when stopes below the transverse stope have been mined. Once primary stopes have been filled with CRF, secondary stopes will be mined. Secondary stopes generally lie between cemented primary stopes and are filled with waste rock. Level 440 is planned to be used as a starting level, and ore below this is planned to be mined working below a ~5m thick ore crown pillar which is planned to be recovered when retreating from the production area. More starting levels will be used where necessary to ensure enough workable stoping locations for steady production.</li> <li>• In longitudinal stopes the front end of the stopes will be filled with CRF. The next stope opening will then be blasted so that no pillar will be left against the CRF wall, thus maximising ore recovery. In transverse stoping, primary stopes will be filled with CRF to allow maximum recovery for the secondary stopes. When a secondary transverse stope is being mined in two parts, the front end of the first part will be filled with CRF to allow the recovery of the second part.</li> <li>• Stope designs generally include dilution to ensure that stope shapes are practical and can be mined. This dilution is included in stope tonnes and grades as planned dilution. In addition, overbreak is assumed to result in unplanned dilution. In longitudinal stoping, the dilution factor is dependent upon the stope width and shape. It is assumed that approximately 0.5 metres of overbreak will occur on both sidewalls of the stopes. Therefore dilution varies between 5% in wide stopes (&gt;20 metres) and 25% in narrow stopes (4 metres). When stope shape and stope location is seen exceptionally difficult an additional dilution factor 2 to 10% is used.</li> <li>• In the primary stopes of transverse stoping, both sidewalls are in ore and therefore no waste rock dilution comes from them. The footwall and hangingwall ends of the stope are in waste rock and 5-15% dilution is expected from them. In secondary stopes both sidewalls are made of CRF, and 5% of zero grade CRF dilution (which approximates a 56cm layer of CRF and bogged waste from the filled stope below) is assumed to come from them. The stope ends are in waste rock similarly to primary stopes, and 5-15% waste rock dilution is expected from them.</li> <li>• Unplanned waste rock dilution is expected to come from footwall and hangingwall in a 50/50 ratio. The diluting material carries metal grades. The dilution grades that are used are calculated average values for the Wombat orebody assuming a 0.5 m thick layer on both ends of the stope.</li> <li>• The definition for dilution here is assumed to be the ratio dilution tonnes / in-situ ore tonnes (before ore loss).</li> <li>• The recovery from planned stopes is assumed to be 90% for longitudinal and 85% for upwards stoping. The planned recovery for primary transverse stopes is assumed to be 92% and for secondary stopes 85%. The unrecovered ore is assumed to result mainly from failed blasts that fail to loosen the ore or from oversize boulders that prevent full clean-up of the stopes.</li> </ul>

Criteria	Commentary
	<ul style="list-style-type: none"> <li>• The mine is using a cavity measurement surveying (CMS) device for measuring the actual stope volumes. Stope recovery and dilution of each stope is analysed based on the CMS results and this information is used to continuously improve the planning and production processes.</li> <li>• The minimum stope width used in longitudinal stoping is 4 metres. Transverse stopes have fixed widths of 10 metres (primary stopes) and 15 metres (secondary stopes).</li> <li>• The development work of infrastructure for mining below level 380 is under way. Infrastructure will include the decline, access drives, development drives, ventilation headings/rises and support headings (such as water sumps). Electricity, water, ventilation and water discharge systems are also under construction. At the moment (May 2014) the decline is proceeding at level 470 and level development at levels 350 and 380 will soon be finished. Main areas for level development at May 2014 are the 410 and 440 levels.</li> <li>• Reserves are derived only from Measured and Indicated Resource categories.</li> </ul>
Metallurgical factors or assumptions	<ul style="list-style-type: none"> <li>• The Kylylahti mine and Luikonlahti mill have been operating since early 2012 processing Kylylahti ore as designed in the 2010 Definitive Feasibility Study; extensive detail is given in the ASX release dated 23/10/2010.</li> <li>• The metallurgical process is well established; 3 stage crushing, rod mill and pebble mill followed by flotation to produce copper-gold concentrate and a zinc concentrate for sale, together with a low-grade cobalt-nickel concentrate for storage and a sulphur concentrate for disposal. The flowsheet is virtually identical to that employed at the plant in the past for 15 years of treating similar ore.</li> <li>• Metallurgical recoveries are well established and vary slightly with head grade on average the recoveries are: <ul style="list-style-type: none"> <li>- Copper 92.1%</li> <li>- Gold 74.9%</li> <li>- Zinc 49.0%</li> </ul> </li> <li>• Extensive metallurgical testwork representative of the ore body has been completed over the 20 years between discovery and production. Metallurgical domains reflect the geological domain with massive and disseminated sulphides.</li> <li>• There are no deleterious elements.</li> <li>• Bulk sampling is not applicable, as the mine is in production.</li> <li>• The saleable product is a concentrate, not a mineral.</li> </ul>
Environmental	<ul style="list-style-type: none"> <li>• Mined waste rock will be used in stope backfill. Before stoping and backfilling commenced, development waste rock has been stored in a constructed waste rock pile on the surface. Rain and seepage waters are collected and treated before being drained into the environment. When mining advances, the waste rock pile will be transported underground into stope fill.</li> <li>• Mined ore is trucked 43 kilometres to the Luikonlahti mill for processing. Copper-gold and zinc concentrates are produced for sale and Co-Ni and Sulphur concentrates are stored in lined dams for possible sale or further processing in the future. The final tailings are non-acid forming and are stored in the tailings storage facility. All rain, process and seepage waters are collected and treated before being drained to the environment. The exception is a small amount of leakage from an old pit at Luikonlahti which is permitted under licence conditions. Altona is investigating collection of these waters.</li> <li>• Both Mine and Mill operate under granted Environmental Permits.</li> </ul>
Infrastructure	<ul style="list-style-type: none"> <li>• All required infrastructure is in place and has been used since production started at early 2012.</li> <li>• The processing plant is located 43 kilometres from the mine.</li> </ul>

Criteria	Commentary
	<ul style="list-style-type: none"> <li>• Power, water and transportation is available and already in use.</li> <li>• The centre of the municipality of Polvijärvi (~5,000 inhabitants) is located only 2 kilometres from the Kylylahti mine. Additionally the town of Outokumpu and the city of Joensuu are located 20 kilometres and 40 kilometres away from the mine respectively. Accommodation is readily available in all these places. The mine has currently all the workforce needed for full operation.</li> <li>• The centre of the village Luikonlahti (~500 inhabitants) is located ~3 kilometres from the Luikonlahti mill and the centre of the municipality of Kaavi (~3000 inhabitants) is located ~15 kilometres from the processing plant. Additionally the town of Outokumpu and the city of Kuopio are located 40 kilometres and 75 kilometres away from the processing plant respectively. Accommodation is readily available in these places. The processing plant has currently all the workforce needed for full operation.</li> </ul>
Costs	<ul style="list-style-type: none"> <li>• The Kylylahti mine and Luikonlahti mill have been operating almost two years since early 2012, processing Kylylahti ore as designed in the feasibility study. The experience from production is used for estimating the capital and operating costs.</li> <li>• Allowances made for the content of deleterious elements in concentrate (currently there are no deleterious elements in the copper-gold concentrates but cobalt and iron penalties in zinc concentrates) are based on the agreements made with the current customer.</li> <li>• The long term metal prices used for Ore Reserve estimation are based on the company's forecasts and are as follows: <ul style="list-style-type: none"> <li>- Copper: 3.00 US\$/lb</li> <li>- Gold: 1300 US\$/oz</li> <li>- Zinc: 0.85 US\$/lb</li> </ul> </li> <li>• The exchange rate used in the study is based on the company's forecasts and is as follows: <ul style="list-style-type: none"> <li>- Euro/USD: 1.25</li> </ul> </li> <li>• The transportation charges used are based on the current contracts.</li> <li>• The treatment and refining charges and also penalties (currently none applicable) are based on the agreements made with the current customer.</li> <li>• The allowances made for royalties payable (government/private) are based on Finnish mining legislation. There is no government royalty payable and only small compensation payments are made to landowners. Most of the operations are situated on land owned by the company.</li> </ul>
Revenue factors	<ul style="list-style-type: none"> <li>• Kylylahti mine and Luikonlahti mill have been operating since early 2012 processing Kylylahti ore as designed in the feasibility study. The operating experience and current agreements with customers are used to estimate the revenue factors.</li> <li>• The metal prices used are based on LME pricing less various standard deductions and charges for treatment and refining as per the agreements made with the current customer.</li> </ul>
Market assessment	<ul style="list-style-type: none"> <li>• Altona regularly reviews supply and demand characteristics for copper metal. At the forward prices assumed, Altona believes resources are economic.</li> <li>• Copper is a freely traded commodity on world markets.</li> <li>• Regular copper supply and demand analysis is available from a variety of sources (eg. Merchant banks, trading houses, brokers etc).</li> <li>• Copper is not an industrial mineral.</li> </ul>
Economic	<ul style="list-style-type: none"> <li>• Kylylahti is an operating mine. Operating costs are based on actual data, not assumptions.</li> <li>• Reserves are estimated on the basis of the net smelter return using long term copper prices and actual operating cost data.</li> </ul>
Social	<ul style="list-style-type: none"> <li>• The Kylylahti mine and Luikonlahti Mill are fully permitted and operating</li> </ul>

Criteria	Commentary
	according to those permits. The Company undertakes various community engagement activities and sponsorships with local municipalities.
Other	<ul style="list-style-type: none"> <li>• Risks are those typical of underground copper mines.</li> <li>• All necessary legal agreements are in place and in order.</li> <li>• All necessary governmental agreements and licencing requirements are in place and in order.</li> </ul>
Classification	<ul style="list-style-type: none"> <li>• Reserves have been classified as Proved Ore Reserves and Probable Ore Reserves. Proved Ore Reserves have been derived from the Measured Resource category and Probable Ore Reserves from the Indicated Resource category.</li> <li>• The Proved Ore Reserves category comprises Ore Reserves in the Wallaby, Gap and Wombat orebodies between levels 70 and 380 excluding 180 and 210 level hangingwall gold rich stopes and development, 270 and 300 level hangingwall gold rich stopes and development, which are included in the Probable Ore Reserves category.</li> <li>• The Probable Ore Reserve category includes Ore Reserves from level 380 downwards including also those areas described in the previous point. Also remaining reserves at 50-level are included in the Probable Ore Reserves.</li> <li>• Results appropriately reflect the Competent Person`s view of the deposit.</li> <li>• No Probable Ore Reserves have been derived from Measured Mineral Resources.</li> </ul>
Audits or reviews	<ul style="list-style-type: none"> <li>• An external review of the procedures used for reserve estimation has been carried out by Optiro.</li> <li>• Above 300 metre level mining reconciliation information is available which is constantly internally reviewed.</li> <li>• The mine plan on which the reserves are based on is internally reviewed.</li> <li>• An external geotechnical study concerning the transverse stoping and mine infrastructure in the Wombat orebody is currently ongoing.</li> </ul>
Discussion of relative accuracy/confidence	<ul style="list-style-type: none"> <li>• No relative accuracy and confidence level work has been done.</li> <li>• Underground mining information with grade control data and mill reconciliation data exists and has been used which increases the confidence of the reserve estimates.</li> </ul>

Für die Richtigkeit der Übersetzung wird keine Haftung übernommen! Bitte englische Originalmeldung beachten!